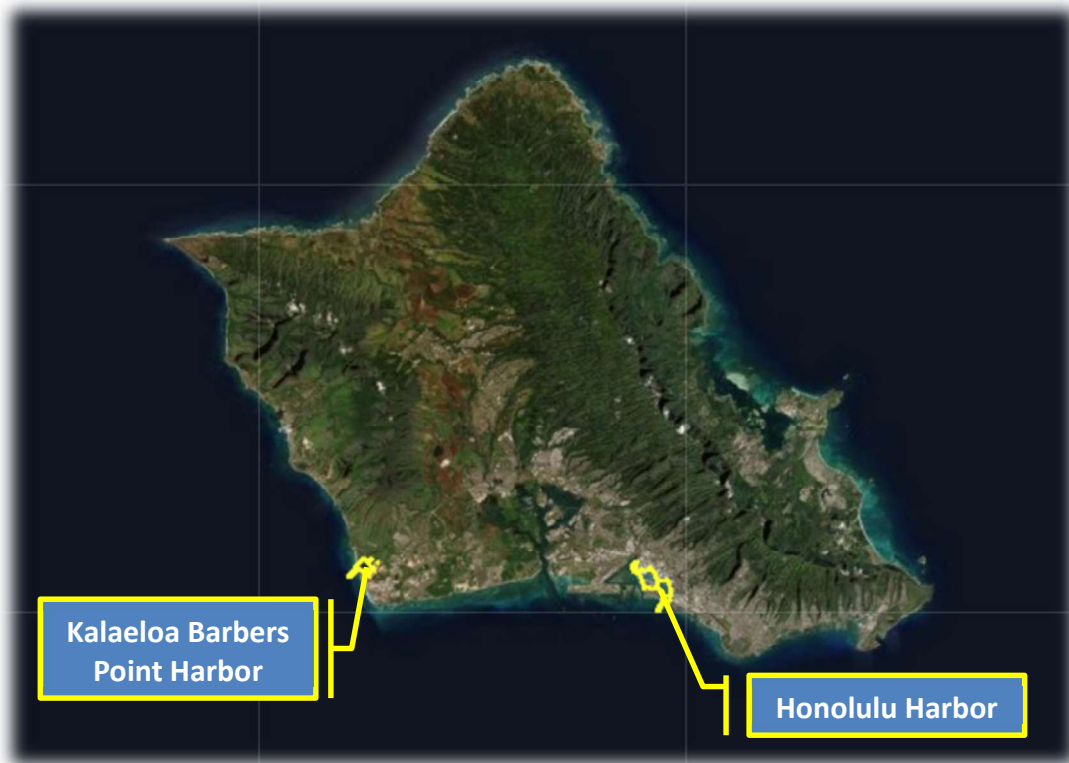


State of Hawaii Department of Transportation
Harbors Division

2022 ANNUAL REPORT

HONOLULU HARBOR (HI 03KB482) AND
KALAELOA BARBERS POINT HARBOR
(HI 03KB488)



January 28, 2023



MĀLAMA I KE AWA KAI - Protect Our Harbor Waters

2022 Annual Report

Honolulu Harbor (HI 03KB482)
Kalaeloa Barbers Point Harbor (HI 03KB488)

Prepared For:
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January 2023

Certification Page

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and believe, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowingly violations."



Signature

Jan 27, 2023

Date

Printed Name: EDWIN H. SNIFFEN

Title: Director of Transportation

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LIST OF ACRONYMS AND ABBREVIATIONS

AG	Attorney General
AR	Annual Report
AMS	Asset Management System
BMP	Best Management Practice
CCH	City and County of Honolulu
CD	Consent Decree
CFR	Code of Federal Regulations
CIP	Capital Improvement Project
COVID-19	Coronavirus Disease 2019
CSRCP	Construction Site Runoff Control Program
CWA	Clean Water Act
CWB	Clean Water Branch
DPP	Department of Planning and Permitting
ERP	Enforcement Response Plan
ENV	Department of Transportation Office of Environmental Compliance
GIS	Geographic Information System
HAR	Hawaii Administrative Rules
HAR-E	Harbors Division Engineering Branch
HAR-EC	Harbors Division Engineering Branch Construction Section
HAR-ED	Harbors Division Engineering Branch Design Section
HAR-EE	Harbors Division Engineering Branch Environmental Section
HAR-EM	Harbors Division Engineering Branch Maintenance Section
HAR-EP	Harbors Division Engineering Branch Planning Section
HAR-ESP	Harbors Division Engineering Branch Special Projects Section
HAR-O	Harbors Division Oahu District
HAR-OC	Harbors Division Oahu District Operations Section
HAR-OE	Harbors Division Oahu District Enforcement and Security Unit
HAR-OM	Harbors Division Oahu District Baseyard Maintenance
HAR-PM	Harbors Division Property Management Staff
HAR-S	Harbors Division Staff Services Office

HAR-SI	Harbors Division Management Information Systems Staff
HDOH	State of Hawaii Department of Health
HDOT	State of Hawaii Department of Transportation
HRS	Hawaii Revised Statutes
IDDE	Illicit Discharge Detection and Elimination
IWDP	Industrial Wastewater Discharge Permit
KBPH	Kalaeloa Barbers Point Harbor
MARAD	United State Maritime Administration
MCS	Marine Cargo Specialist
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MOA	Memorandum of Agreement
MS4	Municipal Separate Storm Sewer System
NGPC	Notice of General Permit Coverage
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operations & Maintenance
ORIIP	Outfall Reconnaissance Inventory and Inspection Program
P2/GH	Pollution Prevention and Good Housekeeping
POW	Protect our Water
SIDR	Suspected Illicit Discharge Reporting
SSS O&MP	Storm Sewer System Operations & Maintenance Program
SVGP	Small Vessel General Permit
SWMP	Stormwater Management Plan
TIM	Tenant Inspection Manual
TIP	Tenant Inspection Program
TRP	Tenant Revocable Permit
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency
VGP	Vessel General Permit

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CONTACT PHONE NUMBERS

Department of Transportation, Harbors Division

Environmental Hotline/Engineering Branch Environmental Section	808-587-1962
Harbor Traffic Control Unit (available 24 hours)	808-587-2076

State of Hawaii, Department of Health

Clean Water Branch	808-486-4309
Hazard Evaluation & Emergency Response	808-586-4249
Solids and Hazardous Waste Branch	808-586-4226

City and County of Honolulu

Environmental Concern Line	808-768-3300
Storm Drain Permit Connection	808-768-8106
Industrial Discharges to Sanitary Sewer	808-768-8210
Sanitary Sewer Spills/Trouble	808-768-7272

United States Coast Guard Marine Safety Office	808-535-3222
United States Environmental Protection Agency, Region 9	415-947-8000

1.0 EXECUTIVE SUMMARY

This report summarizes performance metrics, accomplishments, and compliance with the 2022 Stormwater Management Plan (SWMP), Hawaii Administrative Rules (HAR) 11-55, Appendix K requirements for the Honolulu Harbor and Kalaeloa Barbers Point Harbor (KBPH).

The State of Hawaii, Department of Health, Clean Water Branch (HDOH-CWB) is reviewing the State of Hawaii, Department of Transportation, Harbors Division (hereinafter referred to as “HDOT-Harbors”) two Notice of General Permit Coverages (NGPC) under Hawaii Administrative Rules (HAR) 11-55, Appendix K for their Small Municipal Separate Storm Sewer Systems (MS4s) submissions. The previous permit identification numbers HI 03KB482 for Honolulu Harbor and HI 03KB488 for Kalaeloa Barbers Point Harbor authorize discharges of stormwater and certain non-stormwater discharges to the adjacent receiving waters.

In responding to HDOT's request, the 2014 Consent Decree (CD) was terminated as of February 18, 2022. In 2022, HDOT-Harbors revised their own SWMP (Attachment 16) and program manuals to reflect the requirements promulgated in HAR 11-55 Appendix K. Alongside, outmoded Best Management Practice (BMP) measurable goals was evaluated and replaced with more appropriate targets, program activities, policies, and requirements evolved over the last several years.

The six minimum control measures (MCM) that initiated the HDOT-Harbors stormwater program have been determined to be effective in reducing the discharge of pollutants in stormwater. The small MS4 cleaning and street sweeping programs continue to prevent debris from entering adjacent receiving waters. The persistent training/outreach and inspection programs promote and help HDOT-Harbors employees, tenants, consultants, contractors, and general public with the following.

- Identify areas that could potentially generate illicit discharges and implement proper BMPs to deter such incidents from occurring.
- Identify and properly report an illicit discharge, and properly manage potential pollutants at their source to minimize negative impacts to the surrounding environment.

2.0 GENERAL NPDES PERMIT INFORMATION

State of Hawaii NPDES Program Permit Numbers:

Honolulu Harbor: HI 03KB482
Kalaeloa Barbers Point Harbor: HI 03KB488
Annual Report for Permit Year: 1

Reporting Period: January 1, 2022 – December 31, 2022

Permittee (Owner/Operator) Details:

Organization: State of Hawaii
Department of Transportation
Harbors Division

Mailing Address: State of Hawaii, Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

Owner: Edwin H. Sniffen
Title: Director of Transportation

Telephone Number: 808-587-2150

Email: edwin.h.sniffen@hawaii.gov

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On March 7, 2003, HDOT-Harbors filed a Notice of Intent (NOI) for both Honolulu Harbor and KBPH for the Small MS4s on the Island of Oahu. NGPCs for these two storm drainage systems were initially granted by the HDOH in two letters dated May 19, 2003. Coverage for both harbors was extended through HDOH administrative extension dated December 9, 2013, and December 2, 2016, at which time HDOH renewed NGPCs for both Harbors. The revised HAR 11-55 Appendix K was promulgated by HDOH on January 15, 2022. In response, Harbors updated the SWMP and submitted with NOI on May 11, 2022 to obtain coverage under the revised NGPC.

The general permit requires the permittee to:

1. Submit a SWMP within 120 calendar days of the date of the NGPC.
2. Develop, implement, and enforce the SWMP designed to reduce the discharge of pollutants from their Small MS4 to the maximum extent practicable (MEP) in order to protect adjacent harbor water quality.
3. Submit a new NOI with filing fee and obtain a new NGPC for any significant changes to the information submitted in the NOI. This NGPC cannot be modified.
4. Submit the annual report (AR) by January 28 of the following year in accordance with HAR 11-55, Appendix K to the HDOH-CWB.

This document fulfills the HDOT-Harbors requirement to submit an AR for the 2022 SWMP prior to the deadline of January 28, 2023.

2.1 PERMIT COMPLIANCE ASSISTANCE

The permittee relies on the entities listed in Table 1 to satisfy some of its NPDES permit obligations.

Table 1. NPDES Permit Compliance Assistance

Role	Responsibilities
State of Hawaii Department of the Attorney General (AG)	<ul style="list-style-type: none"> Makes changes to related Hawaii Revised Statutes (HRS) and HAR as necessary. Serves as primary interface with United States Environmental Protection Agency (USEPA) Region 9. Provides legal authority and support to the approved Enforcement Response Plan (ERP).
State of Hawaii Department of Transportation Office of Environmental Compliance (ENV)	<ul style="list-style-type: none"> Ensure HDOT complies with all federal, state, and local environmental regulations and permit, relating to MS4 compliance.
City & County of Honolulu Department of Planning & Permitting (DPP) Site Development Division	<ul style="list-style-type: none"> Authorizes and tracks drainage connections to its sanitary sewer system through Industrial Wastewater Discharge Permit (IWDP).

Table 1. NPDES Permit Compliance Assistance

Role	Responsibilities
Wastewater Branch	
Construction Managers (Various Firms)	<ul style="list-style-type: none"> • Conducts construction inspections. • Ensures construction sites comply with applicable environmental regulations.
Design Consultants (Various Firms)	<ul style="list-style-type: none"> • Incorporates stormwater management program requirements in applicable HDOT-Harbors facilities design projects.
HDOT-Harbors Oahu District	<ul style="list-style-type: none"> • Implements the Storm Sewer System Operations and Maintenance Program (SSS O&MP). • Use <i>Cityworks</i> to keep track of relevant activities where applicable. • Provides suggestions to improve the program, including purchasing new equipment. • Participates in and assists with enforcement.
EnviroServices & Training Center, LLC	<ul style="list-style-type: none"> • Assists HDOT-Harbors with: <ul style="list-style-type: none"> ○ Providing information to the public. ○ Tenant outreach and education. ○ Employee and contractor training. ○ Environmental inspections. • Reporting requirements of the Small MS4 permits, and other environmental regulations.
Element Environmental, LLC	<ul style="list-style-type: none"> • Assists HDOT-Harbors in meeting the environmentally related civil engineering and reporting requirements (if any), and other environmentally related investigations.
Insight Public Sector, Azteca <i>Cityworks</i> , and Woolpert, Inc.	<ul style="list-style-type: none"> • Assists HDOT-Harbors with installing, configuring, testing, and deploying its <i>Cityworks</i>® Powered asset management system (AMS) and providing ongoing licensing and software support services.

Copies of this AR will be submitted to the HDOH CWB.

2.2 STORMWATER MANAGEMENT PLAN

Revisions were made to the SWMP since the initial NOIs or the last AR. The most recent version of the SWMP was updated and submitted in 2022 in compliance with National Pollutant Discharge Elimination System (NPDES) permits.

3.0 NPDES PERMIT

Table 2 provides a summary of HDOT-Harbors NPDES permit conditions and compliance actions.

Table 2. Status of NPDES Permit Compliance

Description	Yes	No	Explanation
Permittee is in compliance with NPDES permits.	✓		<ul style="list-style-type: none"> • HDOT-Harbors environmental program continued to strive in meeting the six MCMs of NPDES Appendix K permits for both the Honolulu Harbor and Kalaeloa Barbers Point Harbor. • HDOT-Harbors has met permit requirements and is continuously working on improving existing programs.
Permittee has met all conditions of the 2022 SWMP.	✓		HDOT-Harbors has met all conditions of the 2022 SWMP.
Permittee is currently in compliance with record-keeping and reporting requirements.	✓		<ul style="list-style-type: none"> • HDOT-Harbors has adequately retained required records. • HDOT-Harbors is currently using its AMS to manage its stormwater program work processes and related record-keeping in conjunction with its geographic information system (GIS) maps.

3.1.1 SWMP MODIFICATION

This section includes the revisions made to the SWMP (Attachment 16) during the reporting period as required by HAR 11-55 Appendix K. The SWMP has been updated to reflect more practical and effective control measure activities which have been implemented in place since 2015 to be consistent with the overall goals of the program. The updated SWMP was provided in the NOI submittals for the NGPC Appendix K. A copy of this SWMP is available on the Harbors storm water website at <http://hidot.hawaii.gov/harbors/malamaikeawakai/>.

3.1.2 SWMP CORE PROGRESS EVALUATION

HDOT-Harbors continued to work with consultants to meet the requirements of the updated 2022 SWMP. Management continued their involvement to ensure proper implementation of the program.

The HDOT-Harbors education and outreach program is designed for its employees, tenants, consultants, contractors, and the public. The program increases the general awareness of impacts that different activities may have on stormwater runoff, and how BMPs, and post-construction BMPs can help minimize or mitigate those impacts.

The living trainings were conducted virtually or in combination of in-person option in 2022. The HDOT-Harbors Annual Stormwater Pollution Prevention Awareness Training for tenants was provided via two virtual training sessions and one online video through YouTube. Tenants were notified via email or certified letter to attend the training and to provide a completed survey and sign-in sheets to Harbors Engineering Branch Environmental Section (HAR-EE) as proof of completion. On November 16, 2022, HDOT-Harbors participated in a statewide Protect Our Water (POW) Conference to discuss Stormwater Pollution Prevention development; proper installation, maintenance, and inspection of construction BMPs: while also providing a review of updated policies, rules, and procedures.

HDOT-Harbors continued its inspections of high, medium, and low risk tenants in 2022 and provided outreach and education before, during, and after the site visits.

HDOT-Harbors continued to implement the Construction Site Runoff Control Program (CSRCP). In 2022, HDOT-Harbors Engineering Branch (HAR-E) and associated consultants and contractors whose primary job duties are related to implementing this program were invited to attend HDOT-Harbors construction and post-construction training, which was conducted live during the POW conference and became available online post-conference. HAR-EE continued to review and evaluate all projects from design through construction phases, as well as coordinate and inspect regulated construction sites.

HDOT-Harbors Oahu District (HAR-O) continued its work on pollution prevention and good housekeeping (P2/GH). Two rounds of semi-annual and four rounds of quarterly screening inspections were conducted for all accessible and "discretionary" hot spot storm drain inlets and trench drains in 2022, respectively. Follow-up stenciling and comprehensive cleaning were performed at all drain inlets and trench drains identified as requiring further attention by the screening inspectors. In addition, storm drains and trench drains on the five-year cleaning schedule were also cleaned.

HDOT-Harbors continued to use GIS-integrated AMS for recordkeeping, work flow, and data management. The AMS related outreach and training efforts were continued in 2022. Two rounds of AMS workshops were conducted on May 20 and December 2, 2022. HDOT-Harbors Marine Cargo Specialists and Ground Maintenance crews continue to actively use AMS on computer and/or mobile devices to document work results and to report environmental issues found.

3.1.3 PROGRAM EFFECTIVENESS

HDOT-Harbors has determined that the majority of the selected BMPs are appropriate to reduce the discharge of potential pollutants in the stormwater. The metrics detailed in Section 5 of this report were effective at tracking HDOT-Harbors stormwater compliance in 2022.

Table 3 below summarizes data regarding progress to reduce the discharge of potential pollutants.

Table 3. Status of BMPs

MCM ¹ Description	BMP Applied ²	Parameter	Quantity	Does BMP Demonstrate a Direct Reduction in Pollutants?
P2/GH	MS4 Cleaning	Debris	242.10 tons	Yes – pollutants would otherwise remain in MS4
P2/GH	Street Sweeping	Debris	165.41 tons	Yes – pollutants would otherwise discharge to the MS4
IDDE	Elimination of illicit discharges to MS4	Investigations related to MS4 discharges	28	Yes – illicit discharges reduced or eliminated
IDDE	Elimination of direct discharges to Harbor waters (non-MS4 discharges)	Investigations related to non- MS4 discharges	28	Yes – illicit discharges reduced
Notes ¹ MCM = Minimum Control Measure ² Response Action on MCM/resultant outcome				

3.1.4 CHALLENGES AND PROPOSED MODIFICATIONS FOR 2023

The SWMP was updated in 2022 (Attachment 16) to account for the revised HAR 11-55 Appendix K. HDOT-Harbors will continue to evaluate program efficiency and update the SWMP as needed.

3.1.5 WATER QUALITY MONTITORING DATA

Regular operation and maintenance of these permanent BMPs continued in 2022 to keep up their pollutant removal effectiveness. Based on the discussion of program effectiveness in Section 5, HDOT-Harbors has decided that water quality monitoring is not necessary at this time.

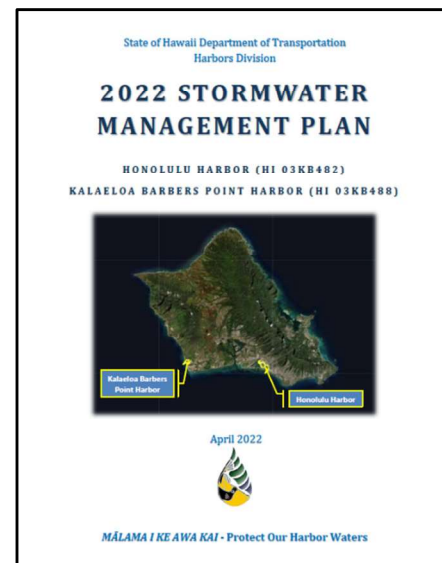


Figure 1. 2022 SWMP

3.1.6 STORMWATER MESSAGES



HAR-EE continues to exercise best available efforts to prominently display the stormwater pollution prevention awareness message “*Mālama I Ke Awa Kai*, Protect Our Harbor Waters,” in all printed and electronic communication with tenants and during employee, tenant, or public trainings. To enhance the visibility, HDOT-Harbors has continued the use of a stormwater pollution prevention awareness logo consisting of the awareness message and a raindrop fish to promote responsible environmental behavior to protect harbor waters.

Additionally, to increase stormwater pollution prevention awareness, stainless steel medallions have been installed adjacent to storm drain inlets and other structures to remind HDOT-Harbors employees, tenants, and the public that all drains lead to the ocean without prior treatment. The medallions are replaced as needed.

Signs installed at visible public areas include information about illicit discharges and the phone numbers (including environmental hotline) for reporting. Based on the inspection and repair results from the past few years, HAR-EE assessed and determined that these sign inspections will be conducted biennially instead of annually.

Figure 2. Pollution Prevention Sign

4.0 STORMWATER MINIMUM CONTROL MEASURES

HDOT-Harbors small MS4 permits are regulated by HAR 11-55, Appendix K, which requires all permittees to develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the permittees small MS4 system to the MEP, to protect water quality, and satisfy the water quality requirements of the Clean Water Act (CWA). HAR 11-55 requires a SWMP to include the following six MCMs with implementation dates and rationales for each measure.

1. Public Education and Outreach;
2. Public Involvement and Participation;
3. Illicit Discharge Detection and Elimination;
4. Construction Site Runoff Control;
5. Post-Construction Stormwater Management in New Development and Re-Development; and,
6. Pollution Prevention and Good Housekeeping.

Appendix K of HAR 11-55 also requires the permittee to develop “measurable goals” to gauge permit compliance and program effectiveness for each MCM identified above. The permittee shall select measurable goals using an integrated approach that fully addresses the requirements and intent of the MCM.

This section details how HDOT-Harbors has met the six requirements and measurable goals.

4.1 PUBLIC EDUCATION AND OUTREACH

HAR 11-55 Appendix K, requires the small MS4 permittee to provide public education and outreach. This public education program provides educational materials to users of the permittee’s small MS4 and outreach activities emphasizing the following:

- A. Impacts of stormwater discharges on water bodies;
- B. Hazards associated with illicit discharges; and
- C. Measures that users of the permittee’s small MS4 can take to reduce pollutants in stormwater runoff, including, but not limited to, minimizing fertilizer application, and practicing proper storage and disposal of chemicals and wastes

Table 4 provides a summary describing HDOT-Harbors' public outreach and education program, including the MCM, milestones, BMP goals, and planned activities.

Table 4. Public Education and Outreach



MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP A.3.1.1 Integrate and promote the message: <i>Mālama i ke awa kai – Protect Our Harbor Waters</i>	HAR-EE	Percentage of tenant outreach and training materials featuring message.	1/1/22	HAR-EE continues to exercise the best efforts to display the stormwater pollution prevention awareness message " <i>Mālama i Ke Awa Kai</i> - Protect Our Harbor Waters" in all printed and electronic communication with tenants and during staff, tenant, or public trainings.		N/A	Continue to integrate message into all printed and electronic communication.
SWMP A.3.1 Continue to provide and disseminate stormwater awareness information to tenants and the public.	HAR-EE	Number of stormwater awareness information provided to tenants and public.	1/1/22	The stormwater message and logo has been included in at least five forms of information: <ul style="list-style-type: none"> • Documents (SWMP, AR). • BMP Handouts • Construction and Post-Construction Brochures • New Tenant Welcome Brochure • Tenant Training Notice • Training Presentations (Tenant, Construction and Post-Construction, and IDDE) 		N/A	Continue to include message wherever beneficial.

Table 4. Public Education and Outreach



MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP A.3.1.2 Maintain a web-based media to disseminate stormwater awareness information.	HAR-EE / HAR-SI	Number of visitors annually.	1/1/22	<ul style="list-style-type: none"> • HDOT-Harbors received a total of 1,340 unique page views in 2022. • There were 1,624 web page views in 2022. 		N/A	None.
SWMP A.3.2 Provide educational outreach to tenants to proactively mitigate activities that could result in pollution.	HAR-EE	<p>Distribute educational materials to tenants that include requirements listed in A.3.2.3.</p> <p>Track percentage of tenants who attended the annual training.</p>	1/1/22	<ul style="list-style-type: none"> • A live virtual training in addition to the online stormwater training video was implemented in lieu of the live training sessions due to COVID-19 pandemic. The video was made available to tenants in January 2022 via YouTube and the live virtual training was conducted on August 5, 2022 and September 1, 2022. • 82.1% of tenants attended this training (Attachment 2d). 		N/A	Continue the efforts and increase the training participation rate through individual calls, visits, email reminder, etc.

Table 4. Public Education and Outreach



MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP A.3.1.4 Use Suspected Illicit Discharge Reporting (SIDR) to track informational inquiries and reports placed to the hotline and follow-up activities.	HAR-EE / HAR-SI	Number of informational inquiries and reports received. Duration from when call is received until response.	1/1/22	All inquiries were responded to within 24 hours.		N/A	Continue to track the number of informational reports received. Distribute SIDR pocket guides for HAR-O & HAR-E use.
SWMP A.3.1.5 Provide outreach to the general public at Honolulu Harbor and KBPH on stormwater issues via Harbors website.	HAR-EE / HAR-SI	Items described in Section 2.1.6 are updated efficiently. Identify website pages to display stormwater awareness message. Link to Harbors website is prominently featured on the main HDOT website.	1/1/22	The web page has been updated throughout 2022 to include updated SWMP, training materials, brochures, and BMP handouts. (http://hidot.hawaii.gov/HDOT-Harbors/malamaikaeawakai/). The links to the other HDOT Division websites are included on the HDOT-Harbors web page.		N/A	Continue to promote web page through trainings and material handouts. Continue to track web page views.

Table 4. Public Education and Outreach



MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP A.3.1.6 Continue to maintain signage at public areas and stencil storm drain inlets to promote stormwater pollution prevention to deter illicit charges into Harbors waters.	HAR-EE / HAR-O	Inspect and maintain signage. Inspect stencils/labels prior to the wet season. Percentage of illegible stencils rectified.	1/1/22	<ul style="list-style-type: none"> Signs are inspected once every two years at Honolulu Harbor and Kalaheo Barbers Point Harbor. 100% of accessible storm drain inlets and trench drains were stenciled. In 2022, a total of 8 drain inlets required re-stenciling. 		N/A	Evaluate the need for additional signs. Replace and repair missing or damaged signs.
SWMP A.3.2.3. Continue to maintain a comprehensive list of BMP handouts covering common tenant activities.	HAR-EE	Comprehensive set of BMP handouts developed and posted on Harbors website.	1/1/22	<p>The BMP Handouts were updated in 2022. A list of updated tenant BMPs is available on the HDOT-Harbors web page:</p> <ul style="list-style-type: none"> http://hidot.hawaii.gov/HDO T-Harbors/malamaikeawakai/ 		N/A	Update and distribute BMP handouts as necessary.

Table 4. Public Education and Outreach



MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP A.3.2.1. Update tenant lease agreements, TRPs, and other materials (upon renewal) to reference or include minimum BMPs and require their implementation.	HAR-PM / HAR-O / HAR-EE	Percent of new/renewed tenants with modified language in their leases or TRPs.	1/1/22	<ul style="list-style-type: none"> 100% of new/renewed tenant leases and revocable permits have incorporated the updated language. Eight new/initial inspection were conducted in 2022, which represents 100% of new tenants formally identified by HAR-PM (Labeled as “new” under the “Inspection Type” column in Attachment 7). 		N/A	Continue to use the new format.
SWMP A.3.3.1 Disseminate information sheets with recommended BMPs for Vessel Operators.	HAR-O / HAR-EE	Continue to distribute BMP handouts for vessel operators when necessary.	1/1/22	<ul style="list-style-type: none"> A BMP handout is available on the HDOT-Harbors web page titled “BMPs for Small Vessel Maintenance Activities.” HDOT-Harbors will continue to work on translating this BMP into other foreign languages as necessary, to provide outreach to non-English speaking users. 		N/A	Distribute updated handouts. Continue to evaluate and translate this BMP into foreign languages, as necessary.

Table 4. Public Education and Outreach



MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP A.3.2.2 Maintain an electronic tenant inventory and update in accordance with the Harbors Tenant Inspection Manual (TIM).	HAR-EE / HAR-PM	Percentage of tenants updated information listed in the electronic inventory based on the most recent inspection.	1/1/22	<ul style="list-style-type: none"> • HDOT-Harbors continued to maintain their electronic tenant inventory. • 100% of tenants are included in <i>Cityworks</i>. 		N/A	Continue to update and maintain tenant inventory data to GIS-integrated AMS.
SWMP B.6.1 Provide effective educational materials to relevant employees to maintain their knowledge of Harbors stormwater pollution prevention program.	HAR-EE	Provide information about stormwater pollution prevention to all Harbors employees. Provide IDDE training to all Marine Cargo Specialists, Harbor Police, and Grounds Supervisors.	1/1/22	<ul style="list-style-type: none"> • Educational materials distributed in 2022 include outreach messages and handouts via emails on July 12, 2022 (Attachment 4a) • 92.6% of Harbors employees responded to the Survey. A summary of the results and copies of questionnaire are included in Attachments 4b and 4c. • The most missed question (#9) was relating to vehicle washing. • A summary of IDDE training records are included in Attachments 5b and 5c. 		N/A	Update the training quiz and distribute to employees.

Table 4. Public Education and Outreach




MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP B.6.1 Provide effective educational materials to relevant employees to maintain their knowledge of Harbors stormwater pollution prevention program.	HAR-EE	Provide training to staff whose job duties include implementing the Tenant Inspection Program (TIP), as specified in the TIM. Provide training to staff whose job duties include implementing the Outfall Reconnaissance Inventory and Inspection Program (ORIIP), as specified in the manual.	1/1/22	<ul style="list-style-type: none"> No TIM inspector training is necessary. A copy of completed questionnaire following ORIIP training is included in Attachment 6c. 		N/A	Update the training quiz and distribute to employees.

Table 4. Public Education and Outreach

MCM/BMP Description	Responsible Party	Evaluation Metric	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP C-CSRCP Section 5.1 & 6 Provide training and resources for Harbors employees, consultants, tenants, and construction contractors regarding construction BMPs. Update training materials when necessary.	HAR-EE / HAR-E	Provide contractors with CSRCP Manual via Harbors Storm Water website. Provide training to personnel whose primary job duties related to implementing the CSRCP.	1/1/22	Handouts are posted on Harbors Storm Water website and available at the annual POW Conference on 11/16/2022.		N/A	Distribute materials annually.
SWMP A.3.2.1 Continue to update the New Tenant Information Package, when necessary, to ensure new tenants are aware of stormwater requirements.	HAR-EE	Develop and update as necessary the New Tenant Information Package to include stormwater requirements.	1/1/22	The new tenant information package is available on the HDOT-Harbors web page and is also provided to the new tenants directly.		N/A	Distribute information to new tenants.

4.2 ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

HAR 11-55, Appendix K requires the small MS4 permittee to create an Illicit Discharge Detection and Elimination (IDDE) program.

The program implements and enforces methods to detect and eliminate illicit discharges that, at a minimum, include the following:

- A. Establish rules, ordinances, or other regulatory mechanism, including enforcement procedures and actions, that prohibit non-stormwater discharges, Section 1 of HAR 11-55, Appendix K lists discharges that do not cause or contribute to any violations of water quality standards, into the permittee's small MS4 system;
- B. Procedures to detect and eliminate illicit discharges as defined in Code of Federal Regulations 40 Section 122.26(b) (2); and
- C. Compile a list of non-stormwater discharges or flows that are considered to be significant contributors of pollutants to the system, and measures to prevent these discharges into the permittee's small MS4, or reduce the amount of pollutants in these discharges.

Table 5 summarizes data regarding HDOT-Harbors' IDDE program, MCMs, BMPs, goals, milestones, and planned activities.


Table 5. Illicit Discharge Detection and Elimination Program							
MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 19 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP TIM – 2 Harbors will inspect all regulated tenants at frequencies based on their environmental risk.	HAR-EE	Percentage of new tenants having initial/new tenant inspection completed.	1/1/22	Eight new/initial inspections were conducted in 2022, which represents 100% of new tenants formally identified by HAR-PM (Labeled as “new” under the “Inspection Type” column in Attachment 7).		N/A	Continue to communicate definition.

Table 5. Illicit Discharge Detection and Elimination Program




MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 19 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP TIM – 4.3 Harbors will inspect all regulated tenants at frequencies based on their environmental risk.	HAR-EE	Percentage of tenants having risk ranking updated per the TIM.	1/1/22	All tenant facilities risk ranking were evaluated/updated in 2022. Two tenant facilities were upgraded from medium to high. Four tenant facilities were upgraded from low to medium.		N/A	Update IDDE and tenant training and continue to conduct site assessments.
SWMP B.2 – TIM Harbors will inspect all regulated tenants at frequencies based on their environmental risk.	HAR-EE	Percentage of follow-up inspections completed within 7 days upon discovery.	1/1/22	100% of follow-up inspections were completed within 7 days of discovery.		N/A	Continue to conduct outreach activities.
SWMP B.2 – TIM Harbors will inspect all regulated tenants at frequencies based on their environmental risk.	HAR-EE	Percentage of follow-up inspections completed within 30 days of a reconnaissance inspection identifying a substantive change to a facility's operation, size, or activities.	1/1/22	A total of 40 reconnaissance inspections were completed in 2022. And none triggered a follow-up inspection.		N/A	Continue the low-risk tenant reconnaissance.

Table 5. Illicit Discharge Detection and Elimination Program





MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 19 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP B.3 - ORIIP Harbors will inspect outfalls to identify illicit discharges.	HAR-EE	Percentage of investigative inspections performed by next working day.	1/1/22	<ul style="list-style-type: none"> 100% of outfalls inspected during dry weather in 2022. Wet weather ORI was not completed because there were no qualified storm event in 2022. 		N/A	<p>Conduct dry weather reconnaissance of all outfalls.</p> <p>Conduct wet weather reconnaissance.</p>
SWMP B.3 ORIIP Section 2.0 and 3.0 Harbors will manage an outfall database that will track locations of outfalls and previous inspections in order to create a more complete picture of potential illicit discharges.	HAR-EE	<p>Re-prioritize all outfalls.</p> <p>Biannually inspect all outfalls ranked Unlikely during dry weather.</p> <p>Annually inspect all outfalls ranked Potential, Suspect, and Obvious during dry weather.</p> <p>Annually inspect outfalls at "high risk" area during wet weather.</p>	1/1/22	<ul style="list-style-type: none"> Dry weather ORI report is found in Attachment 8. Wet weather ORI was not completed because there were no qualified storm event in 2022. HDOT will continue to track storm events in 2023 to conduct wet weather reconnaissance. 141 outfalls were inspected during the dry weather ORI. 10 previously listed outfalls have been closed due to the construction project at Piers 40-43. All 141 outfalls were characterized as Unlikely. 		N/A	Continue to address illicit discharges, if any.

Table 5. Illicit Discharge Detection and Elimination Program							
MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 19 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities 2023
SWMP B.3 - ORIIP Section 3.3 and 3.4	HAR-EE	Percentage of illicit discharges identified during both dry and wet weather inspections properly addressed.	1/1/22	Outfall reconnaissance conducted during dry weather revealed no illicit discharges.		N/A	Continue the related record-keeping.
SWMP B.4 Perform site assessments to identify active or recent illicit discharges and increase the field presence of Harbors personnel.	HAR-O/ HAR-EE	Percentage of identified suspected illicit discharge tracked. Respond to violations in accordance with the ERP.	1/1/22	There were no illicit discharges identified from tenant facilities.		N/A	Continue to address BMPs that need improvement.

4.3 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

HAR 11-55, Appendix K requires the small MS4 permittee to develop, implement, and enforce a program to reduce pollutants in stormwater runoff entering the permittee's small MS4 system from construction activities disturbing one acre or more. Included are construction activities less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more. Program priorities, includes:

- A. Established rules, ordinances, or other regulatory mechanism, including enforcement procedures and actions, that require erosion and sediment controls;
- B. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;

- C. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- D. Procedures for site plan reviews which incorporate consideration of potential water quality impacts;
- E. Procedures for receipt and consideration of information submitted by the public; and
- F. Procedures for site inspection and enforcement of control measures.

Table 6 provides information about the construction site runoff controls, including MCMs, BMPs, goals, milestones, and planned activities.


Table 6. Construction Site Stormwater Runoff Control							
MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
SWMP C-CSRCP Harbors will maintain oversight of all non-exempt construction projects for compliance with the CSRCP.	HAR-E / HAR-EE	Percentage of applicable construction projects reviewed using the Construction Site Design Review Checklist. Percentage of contractor SWPPPs, NOI, and discharge permit applications reviewed.	1/1/22	<ul style="list-style-type: none"> 100% of the NOI-C regulated projects reviewed are required to use the Construction Site Design Review Checklist. 100% of project supporting documents are reviewed as a part of the standard review process. 		N/A	Continue to review form where applicable.

Table 6. Construction Site Stormwater Runoff Control





MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
SWMP C – CSRCP Harbors will maintain oversight of all non-exempt construction projects for compliance with the CSRCP.	HAR-E / HAR-EE/ HAR-PM	Percentage of construction site inspection records into database.	1/1/22	100% of construction site inspection records were entered into database.		N/A	Continue the applicable record-keeping.
SWMP C – CSRCP Harbors will maintain oversight of all non-exempt construction projects for compliance with the CSRCP.	HAR-E / HAR-EE / HAR-PM	Percentage of non-exempted projects less than one acre that submitted Notification Form for Project Site Disturbing Less Than One Acre (HDOT HAR-EE Form SD<1_NFT).		<ul style="list-style-type: none"> 5 HDOT-Harbors projects were considered non-exempt and 2 of them were regulated by NPDES NOI-C Permit (Attachment 11a). 3 reviewed tenant project was considered non-exempt and 2 of them were regulated by NDPS NOI-C Permit (Attachment 11b). 100% of non-exempt projects submitted the form. 		N/A	Continue to review form where applicable.

Table 6. Construction Site Stormwater Runoff Control

MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
SWMP C – CSRCP Harbors will maintain oversight of all non-exempt tenant construction projects for compliance with the CSRCP.	HAR-E / HAR-EE / HAR-PM	Percentage of applicable construction projects reviewed for necessary BMPs. Percentage of tenant site inspection records entered into database.	1/1/22	<ul style="list-style-type: none"> 100% of project supporting documents are reviewed as a part of the standard review process. A total of 8 tenant projects and 22 HDOT-Harbors projects were reviewed in 2022 (Attachments 11a and 11b), which represents 100% of projects requiring environmental review. 		N/A	Review construction plans.
SWMP C- CSRCP Sections 3.4, 4.4 Ensure illicit discharges from Harbors construction projects and tenant improvement projects are deferred or eliminated through inspection and enforcement.	HAR-EE	Percentage of completed enforcement actions recorded in construction project database	1/1/22	<ul style="list-style-type: none"> 100% of completed enforcement actions recorded in the construction project database. None escalated enforcement were triggered in 2022. 		N/A	Continue the related record-keeping.

4.4 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

HAR 11-55, Appendix K requires the small MS4 permittee to develop, implement, and enforce a program to reduce pollutants in stormwater runoff entering the permittee's small MS4 system from new development and redevelopment projects that disturb up to one acre. Included are construction sites less than one acre that are part of a large common plan of development or sale that would disturb one acre or more. The program includes the following:

- A. Establish rules, ordinances, or other regulatory mechanisms, including enforcement procedures and actions, that address post-construction runoff from new development and redevelopment projects.
- B. Structural and/or non-structural BMPs to minimize water quality impacts and attempt to maintain predevelopment runoff conditions; and
- C. Procedures for long-term O&M of BMPs.

Table 7 provides information about HDOT-Harbors post-construction stormwater management activities in new development and redevelopment projects, including MCMs, BMPs, goals, milestones, and planned activities.


Table 7. Post-Construction Stormwater Management in New Development and Redevelopment							
MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
SWMP D.7 Provide training and resources for Harbors engineers, consultants, and contractors regarding Post-Construction BMPs.	HAR-EE	Percentage of personnel whose primary job duties are related to implementing the Post-Construction BMP program have received training.	1/1/22	A total of 47 individuals completed the Post-Construction BMP training, which represents 100% of personnel whose primary job duties are related to implementing the Post-Construction BMP program.		N/A	Continue the training.

Table 7. Post-Construction Stormwater Management in New Development and Redevelopment


MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
SWMP D 1.0, 2.2, 5.4 Harbors will manage all Harbors capital projects that disturb one acre or more of land for compliance with the Post-Construction Stormwater Management Program.	HAR-EE	<p>Percentage of regulated projects reviewed in design phase for necessary BMPs using the <i>Permanent Post-Construction Best Management Practice Plan Checklist</i>.</p> <p>Percentage of projects for which O&M Plans have been reviewed.</p> <p>Percentage of Post-Construction BMP inspections records entered in a database in a format compatible with GIS.</p>	1/1/22	<ul style="list-style-type: none"> The Post-Construction BMP Plan Checklist was used to evaluate 100% of the regulated projects (Attachment 11a). 100% of HDOT-Harbors projects with permanent post-construction BMPs have an O&M plan, where applicable, and ongoing maintenance. 100% of PBMP inspections were recorded in AMS (Attachment 13). Since 2021, PBMP maintenance at Pier 29 is conducted biennially since the container yard is currently not in operation. 		N/A	<p>Continue to use the Post-Construction BMP Plan Checklist for plan review on applicable projects.</p> <p>Continue to review plans for permanent BMPs.</p> <p>Update the inventory as necessary.</p>

Table 7. Post-Construction Stormwater Management in New Development and Redevelopment




MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
SWMP D 1 & 2.3 Harbors will manage all tenant improvement projects for compliance with the Post-Construction Stormwater Management Program.	HAR-EE	<p>Percentage of regulated tenant projects reviewed in design phase for necessary BMPs using the Post-Construction BMP Plan Checklist.</p> <p>Percentage of tenant facilities with permanent BMPs that have an updated revocable permit or lease language requiring the implementation of the operation and maintenance plan.</p>	1/1/22	<ul style="list-style-type: none"> The Post-Construction BMP Plan Checklist was used to evaluate 100% of the regulated projects (Attachment 11b). All projects with permanent BMPs have an O&M Plan. 100% of tenant projects with PBMPs have O&M plans or have adopted one from the manufacturer(s). 		N/A	<p>Continue to review plans for permanent BMPs.</p> <p>Update leases (when applicable) for tenants with permanent BMPs in include requirements for an O&M plan</p>

Table 7. Post-Construction Stormwater Management in New Development and Redevelopment

MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
SWMP D.1 & 2.3 Harbors will manage all tenant improvement projects for compliance with the Post-Construction Stormwater Management Program.	HAR-EE	Percentage of projects for requiring annual Post-Construction BMP inspections were conducted by tenants and reported to Harbors. Percentage of Post-Construction BMP inspections conducted by Harbors, including those conducted during regular tenant inspections.	1/1/22	<ul style="list-style-type: none"> 100% of required PBMP inspections are conducted by tenants and reported to HDOT-Harbors. UHMC performs maintenance on the PBMPs at Pier 35 as part of their lease agreement. No escalated enforcement actions were necessary. 		N/A	Continue to use the Post-Construction BMP Plan Checklist for plan review on applicable projects. Continue inspections where necessary.
SWMP D.6 Ensure illicit discharges from improperly managed Post-Construction BMPs are mitigated by inspection and enforcement.	HAR-E	Percentage of enforcement actions recorded in project database.	1/1/22	There were no escalated enforcement actions relating to permanent BMPs in 2022.		N/A	Record enforcement as necessary

4.5 POLLUTION PREVENTION AND GOOD HOUSEKEEPING

HAR 11-55, Appendix K requires the small MS4 permittee to develop a P2/GH program that will implement and enforce an O&M program to prevent and reduce stormwater pollution from activities, including, but not limited to, park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance that, at a minimum, includes the following:

- A. Good housekeeping and other control measures; and
- B. Employee and contractor training on good housekeeping practices to ensure that good housekeeping measures and BMP practices are properly implemented.

Table 8 provides information about the P2/GH program, including MCMs, BMPs, goals, milestones, and planned activities.






Table 8. Pollution Prevention and Good Housekeeping							
MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
Ensure the small MS4 conveys water to the harbor without obstructions or adding pollutants by performing initial and recurring cleaning.	HAR-O / HAR-E	<p>Percentage accessible features specified by SSS O&M Plan that were cleaned.</p> <p>Percentage of feature inspections recorded in database.</p> <p>Percentage of hot spots identified for which BMPs were implemented or modified.</p>	1/1/22	<ul style="list-style-type: none"> 100% of accessible storm drain inlets and trench drains were inspected and cleaned in 2022 (Attachment 14a & 14b). 100% of inspection findings and cleaning results were recorded in the AMS. Accessible drainage features were cleaned in 2022 when needed. Approximately 21.37 tons of debris were removed from the cleaning activities. 		N/A	Continued small MS4 O&M.

Table 8. Pollution Prevention and Good Housekeeping

MCM/BMP Description	Responsible Dept. / Section	BMP Applied/ Measurable Goal(s)	BMP Start Date	Permit Year 1 Milestones/Progress on Goal(s)	Completed in 2022?	New or Revised Goal	Planned Activities for 2023
Designate appropriate drainage system maintenance and perform maintenance according to inspection results.	HAR-EE / HAR-EP	Once every five years, determine the percentage of accessible drainage features that have been cleaned.	1/1/22	100% of accessible storm drain inlets and trench drains due for 5-year cleaning were inspected and cleaned in 2022.		N/A	Continue to track drainage features that have been cleaned.
SWMP E.3.1 Review applications related to washing activities.	HAR-EE / HAR-EP	Percentage of washing activities that have submitted applications for approval.	1/1/22	One wash application was received for review and approval in 2022.		N/A	Continue to review applications as received
SWMP E.3.2 Review applications for dry wells and infiltration sinks.	HAR-O	Percentage of submitted applications for dry wells and sinks that were reviewed.	1/1/22	No applications were received for reviewed in 2022.		N/A	Continue to review applications as received
SWMP A.3.2 Provide general outreach materials to harbors employees and tenants for Pollution Prevention and Housekeeping.	HAR-O	Percentage of harbors employees and tenants provided with educational materials.	1/1/22	100% of harbors employees and tenants were provided with educational materials in 2022.		N/A	Continue to train harbors employees and tenants on Pollution Prevention and Housekeeping.

5.0 PROGRAM OUTPUTS AND ACCOMPLISHMENTS

5.1 MS4 PROGRAM EXPENSES

Program expenditures include the costs of several consultant contracts as well as an estimate of time spent by HDOT-Harbors employees, AG and ENV support to ensure compliance with the conditions of the NPDES permit. Total expenditures in 2022 were slightly less than the previous year. Overall, funds expended in 2022 met current needs. Table 9 provides a summary of the MS4 program expenses.

Table 9. MS4 Program Expenses	
Item	Response
Office of Environmental Compliance created/staffed	Yes
Annual program budget/expenditures* ('Best efforts' estimates of 2021 expenditures)	
• Public Education and Outreach & Public Participation and Involvement program expenditures	\$50,809
• Illicit Discharge Detection and Elimination Program expenditures	\$237,988
• Construction Site Runoff Control expenditures	\$181,449
• Post-Construction Stormwater Management in New Development and Re-development programs expenditures**	\$67,219
• P2/GH BMP program expenditures	\$474,534
• General Permit Compliance expenditures	\$274,836
• Program Total Expenditures	\$1,286,834
Funding mechanisms(s) - (Routine Maintenance Fund, Special Maintenance, Major Maintenance, Service Project, Equipment Acquisition, Capital Improvement Project (CIP))	Routine and Special Maintenance Funds, CIP
Notes:	
Data is from the 2022 calendar year.	
*Expenditures from HDOT-Harbors employees have been approximately based on the estimated percentage of time that they worked on stormwater related tasks.	
**Permanent Post-Construction BMP plan checklist reviews and associated inspections are accounted for under the Construction Site Runoff Control category since they are completed in conjunction with construction related tasks.	

Figure 3 shows \$474,534 (37%) of the total expenditures for 2022 were for P2/GH BMP program expenditures. The General Permit Compliance program was the second-highest expense at \$274,836 (21%). The IDDE program was third most expensive at \$237,988 (18%). The Construction program cost \$181,449 (14%) of the total budget, the Post-Construction cost \$67,219 (5%), and the Public Education/Involvement program program cost \$50,809 (4%).

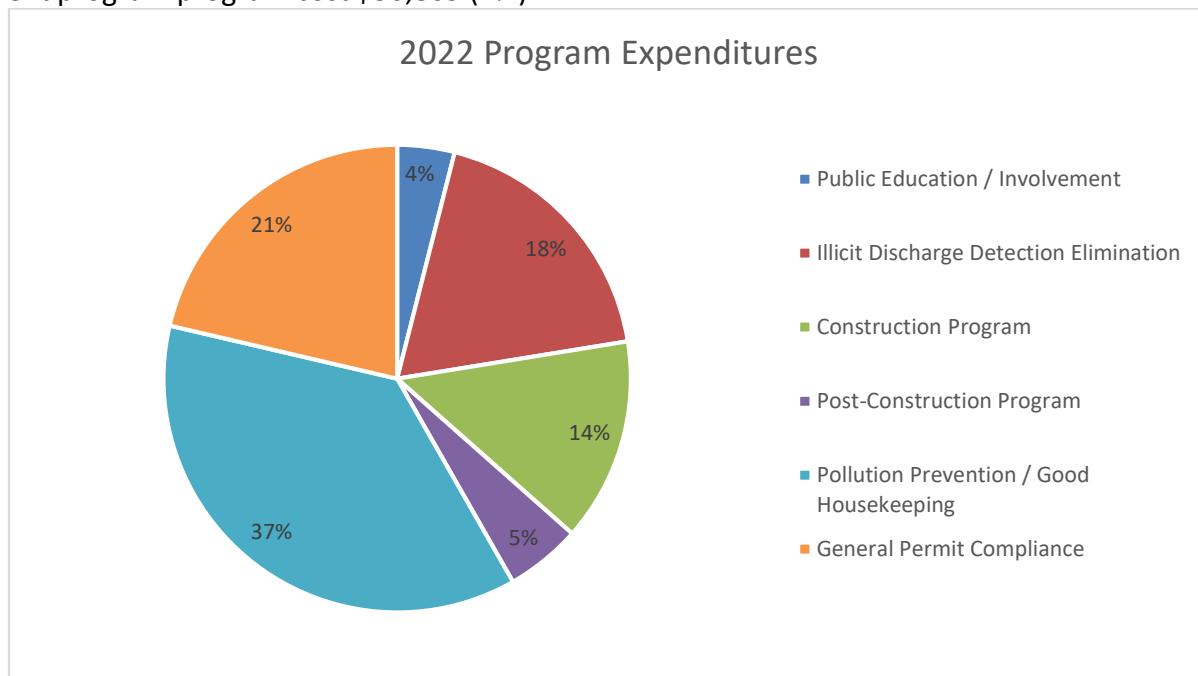


Figure 3. 2022 Program Expenditures

Figure 4 shows the program expenditures over the last eight years.

- The IDDE program expenditures increased in 2022 to \$237,988 compared to \$203,215 in 2021.
- The Construction program cost increased slightly to \$181,449 in 2022 compared to \$162,600 in 2021.
- The General Permit Compliance expenditures increased in 2022. It was \$144,501 in 2021 and increased to \$274,836 in 2022.
- The Public Education and Involvement program decreased in 2022. It was \$80,763 in 2021 and decreased to \$50,809 in 2022.
- The P2/GH program decreased in 2022 to \$474,534 compared to \$669,839 in 2021.
- The Post-Construction program spending increased slightly in 2022 to \$67,219 compared to \$56,500 in 2021.

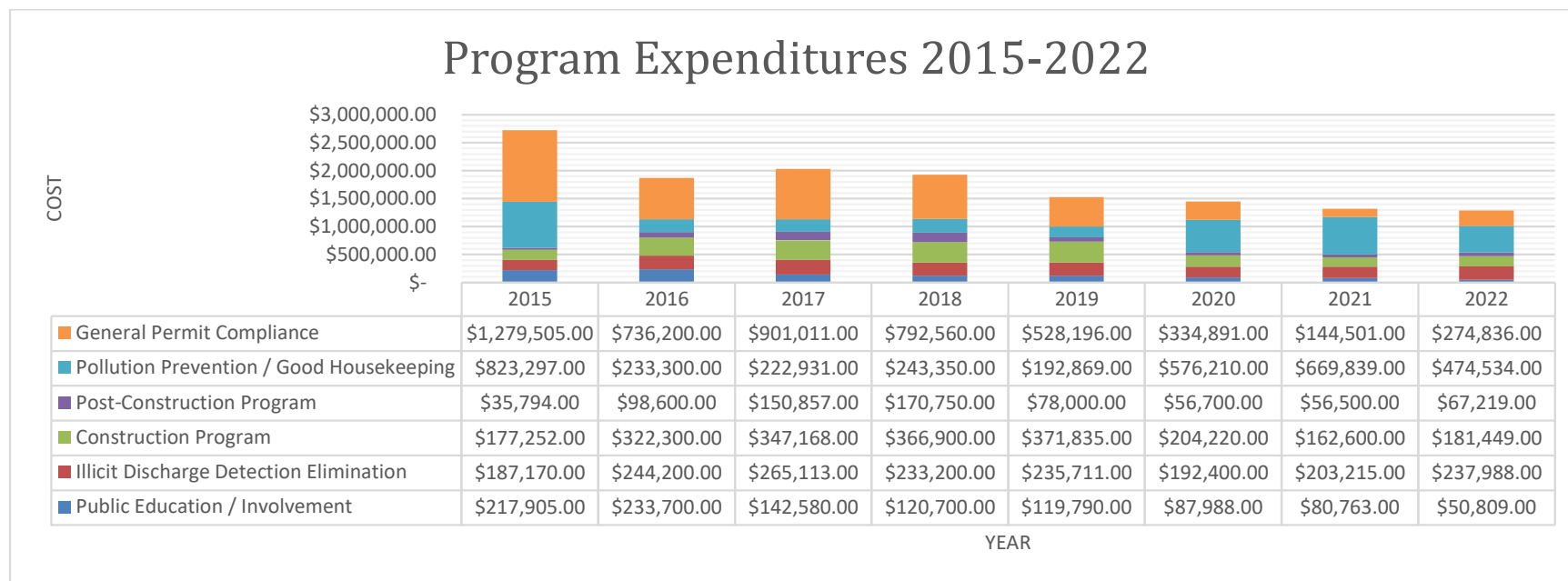


Figure 4. Program Expenditures from 2015-2022

5.2 EDUCATION, INVOLVEMENT, AND TRAINING

The training and education of HDOT-Harbors employees, tenants, and the public remained one of the top priorities in 2022. Reiteration of the environmental requirements, HDOT-Harbors stormwater procedures, and BMPs has shown to be the best way to facilitate a culture of stormwater pollution prevention awareness and compliance. The large number of people trained, and their high quiz scores attest to the effectiveness of the training program.

Additionally, HDOT-Harbors participated in the joint HDOT “Protect Our Water Conference” on November 16, 2022 along with HDOT Highways Division Oahu and Maui Districts, and HDOT Airports Division. The conference highlighted the joint effort that the HDOT divisions are taking to collectively protect the water resources of the State of Hawaii.

Table 10. Education, Involvement, and Training	
Description	Response
Estimated number of people reached by education program(s)*	550
• Tenant General Stormwater BMP Training	85
• Employee Stormwater Training	217
• Construction & Post-Construction Training	47
• IDDE	16
• New Inspector(s)	1
Average score on the environmental knowledge survey(s):	
• Tenant Stormwater Training	94.69%
• Employee Survey (average % correct responses)	96.61 %
Tenants who had positive view of the training	90.6 %
Unique visitors to the stormwater web page	1,340
Public Education Signs	83
Storm Drain Inlets Stenciled	> 768
“Protect Our Water Conference” Attendees	417
Notes: Data is from the 2022 calendar year. *Some individuals may have been trained at two or more of the training sessions; however, they were counted separately.	

Figure 5 provides data on the total number of employees, tenants, and engineering staff/consultants/contractors that received training for the last eight years.

- In 2022, 212 employees, 85 tenants, and 47 engineering staff consultants/contractors were trained.
- In 2021, 227 employees, 127 tenants, and 160 engineering staff consultants/contractors were trained.
- In 2020, 203 employees, 105 tenants, and 139 engineering staff consultants/contractors were trained.
- In 2019, 201 employees, 102 tenants, and 75 engineering staff/consultants/contractors were trained.
- In 2018, 194 employees, 89 tenants, and 26 engineering staff/consultants/contractors were trained.
- In 2017, 189 employees, 123 tenants, and 20 engineering staff/consultants/contractors were trained.
- In 2016, 211 employees, 109 tenants, and 23 engineering staff/consultants/contractors were trained.
- In 2015, 237 employees, 99 tenants, and 28 engineering staff/consultants/contractors were trained.

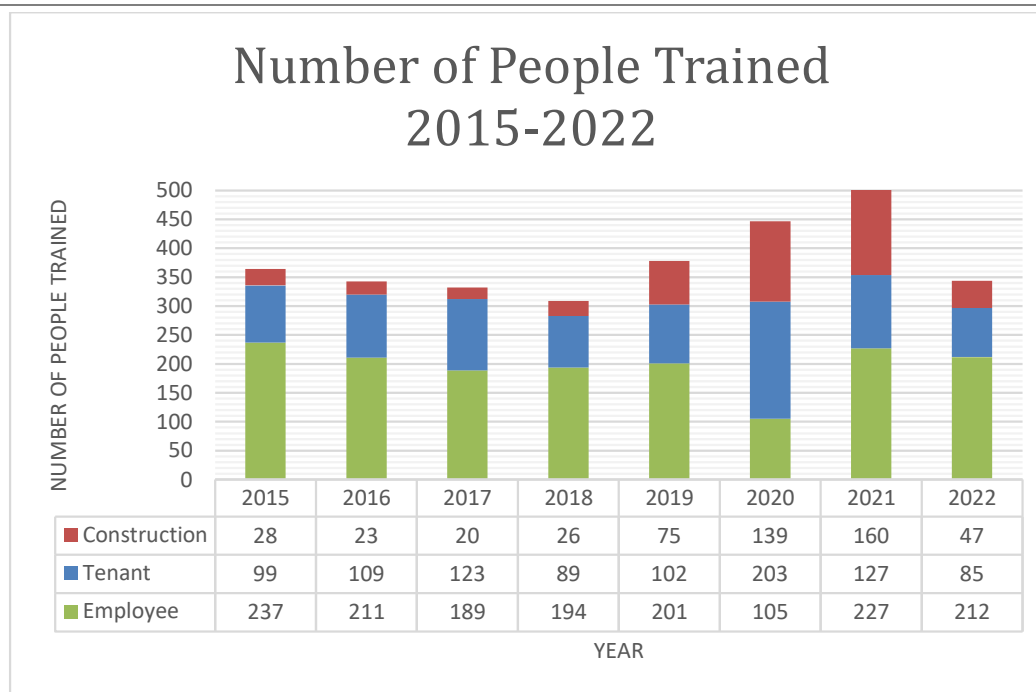


Figure 5. Number of People Trained from 2015-2022

5.3 LEGAL/REGULATORY

All accompanying program elements (listed in Table 11) were in place prior to the 2022 SWMP revision and update.

Table 11. Legal/Regulatory

Description	In Place Prior 2022 SWMP
Illicit Discharge Detection & Elimination	✓
Construction and Post-Construction Related Activities	✓
Post-Development Stormwater Management	✓
Illicit Discharge Detection & Elimination	✓
Construction and Post-Construction Related Activities	✓
Post-Development Stormwater Management	✓

5.4 MAPPING AND ILLICIT DISCHARGES

There were no incidents from suspected illicit discharges that led to escalated enforcement. All investigations ended with the resolution of the illicit discharge issues.

The majority of the illicit discharge reports in 2022 came from HDOT-Harbors staff and tenants. This indicates that the training provided is effective and people understand the proper reporting protocols when potential pollution or a suspected illicit discharge is observed.

Table 12. Mapping and Illicit Discharges	
Description	Response
System-wide mapping complete (Storm Sewer Infrastructure)	100 %
Mapping method(s)	
Paper	when requested
GIS	100 %
Outfalls required to be inspected/screened:	
Honolulu Harbor	113
Kalaeloa Barbers Point Harbor	28
Illicit discharges investigated in 2022	28
SIDR / Public Reports	28
Tenant Inspections	0
Construction Inspections	0
Outfall Reconnaissance	0
Illicit discharges investigated since 2010	366
Complaints/concerns received from public	1
Note: Data is from the 2022 calendar year.	

Figure 6 shows the data recorded for illicit discharge investigations over the past eight years.

- In 2022, there were 28 investigations performed in follow-up to 28 SIDRs.

- In 2021, there were 38 investigations performed in follow-up to 38 SIDRs. There was one from the wet weather ORI but none from tenant inspections and construction inspections.
- In 2020, there were 22 investigations performed in follow-up to 22 SIDRs. There were four from tenant inspections and none from construction inspections or ORI reports.
- In 2019, there were 31 investigations performed in follow-up to 31 SIDRs. There was one from tenant inspections, none from construction inspections, and none from ORI reports.
- In 2018, there were 51 investigations performed in follow-up to 51 SIDRs. There was one from tenant inspections, none from construction inspections, and none from ORI reports.
- In 2017, there were 51 investigations performed for the SDR. There were only two from tenant inspections, none from construction inspections, and none from ORI reports.
- In 2016, there were 26 SDR forms filed, one tenant inspection, no construction inspections, and two ORI reports filed.
- In 2015, there were 27 SDR forms filed, none tenant inspection, no construction inspections, and one ORI report filed.
- In 2014, there were 12 SDR forms filed, five tenant inspections, no construction inspections, and 5 ORI reports filed.

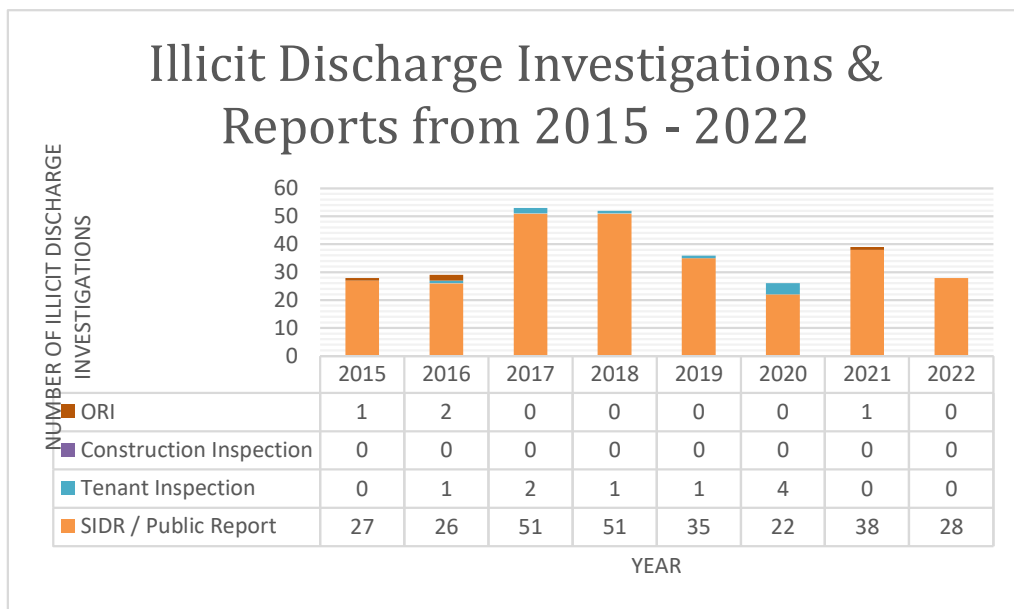


Figure 6. Illicit Discharge Investigations from 2015-2022

5.5 HDOT-HARBORS TENANTS

The risk ranking for tenants in 2022 was consistent with rankings performed in 2021, with 64% of tenant sites classified as low risk. This is consistent with the fact that the majority of tenants at Honolulu Harbor and Kalaeloa Barbers Point Harbor conduct small scale operations.

The risk ranking of two tenant sites changed from medium to high in 2022 following site inspections. Additionally, four tenant sites changed from low to medium in 2022 following site inspections. There were no tenant-related escalated enforcement actions in 2022.

HDOT-Harbors highlighted management of non-stormwater discharges in the annual tenant and IDDE trainings to protect harbor waters, and both efforts will be continued in 2023.

Table 13. HDOT-Harbors Tenants	
Description	Response
Total Unique Tenants	58
Total Tenant Sites	63
• Low Risk Rank	40
• Medium Risk Rank	16
• High Risk Rank	7
Number of Tenant Inspections	71
• New	8
• Regular	40
• Final	4
• Site Reconnaissance	18
• Follow-up	1
Number of Enforcement Actions	0
Note: Data is from the 2022 calendar year.	

Figure 7 represents the distribution of tenant risk ranking. 64% of the tenant sites are low risk, 25% are considered medium risk, and only 11% are considered a high risk.

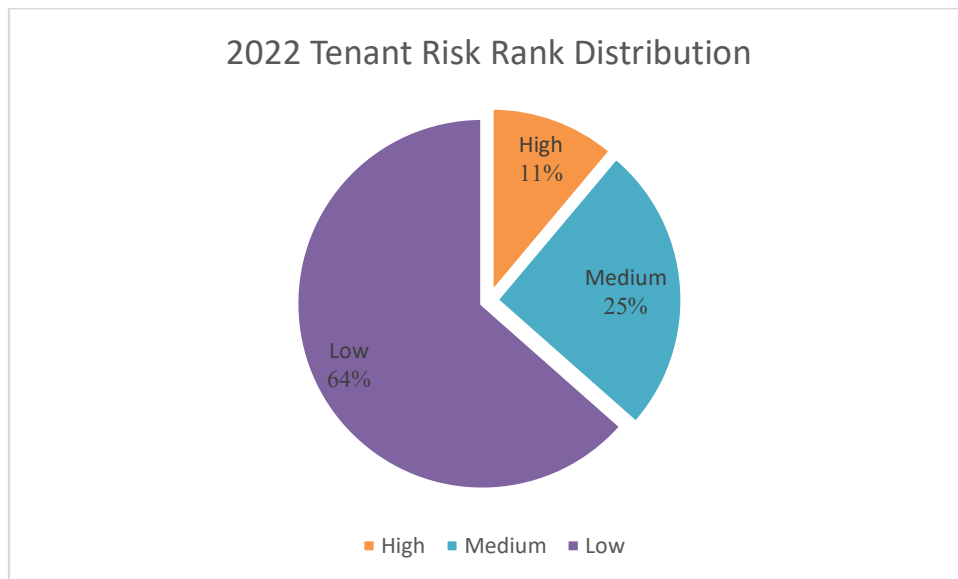


Figure 7. 2022 Tenant Risk Ranking Distribution

5.6 CONSTRUCTION

The number of construction inspections in 2022 increased from 2021. Minor findings were reported and corrected during and following the inspections, leaving zero enforcement actions taken. This indicates that construction-related stormwater training is effective and shows evidence of growing stormwater pollution awareness, as well as the contractor's willingness to learn about the best methods to prevent pollution, and their commitment to protecting the environment.

Table 14. Construction	
Description	Response
Total number of project reviews	30
• HDOT	22
• Tenant	8
Total number of project reviews requiring NGPC	4
Number of inspected construction sites	13
• HDOT-Harbors	5
• Tenant	5
• Others (e.g., CCH, Construction Right-of-Entry (ROE))	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100%
Site inspections completed	107
Enforcement actions	0
• Written warning	0
• Notice of Apparent Violation (NAV)	0
• Issuance of stop work order and summons/citations	0
• Referral to HDOH	0
• Fines collected	0
Note: Data is from the 2022 calendar year.	

Figure 8 illustrates the number of construction inspections and enforcement actions taken over the last eight years.

- In 2022, there were 107 construction inspections and no enforcement actions.
- In 2021, there were 70 construction inspections and no enforcement actions.
- In 2020, there were 55 construction inspections and no enforcement actions.
- In 2019, there were 47 construction inspections and no enforcement actions.
- In 2018, there were 45 construction inspections and no enforcement actions.
- In 2017, there were 31 construction inspections and two enforcement actions.
- In 2016, there were 36 construction inspections and no enforcement actions.
- In 2015, there were 56 construction inspections and six enforcement actions.

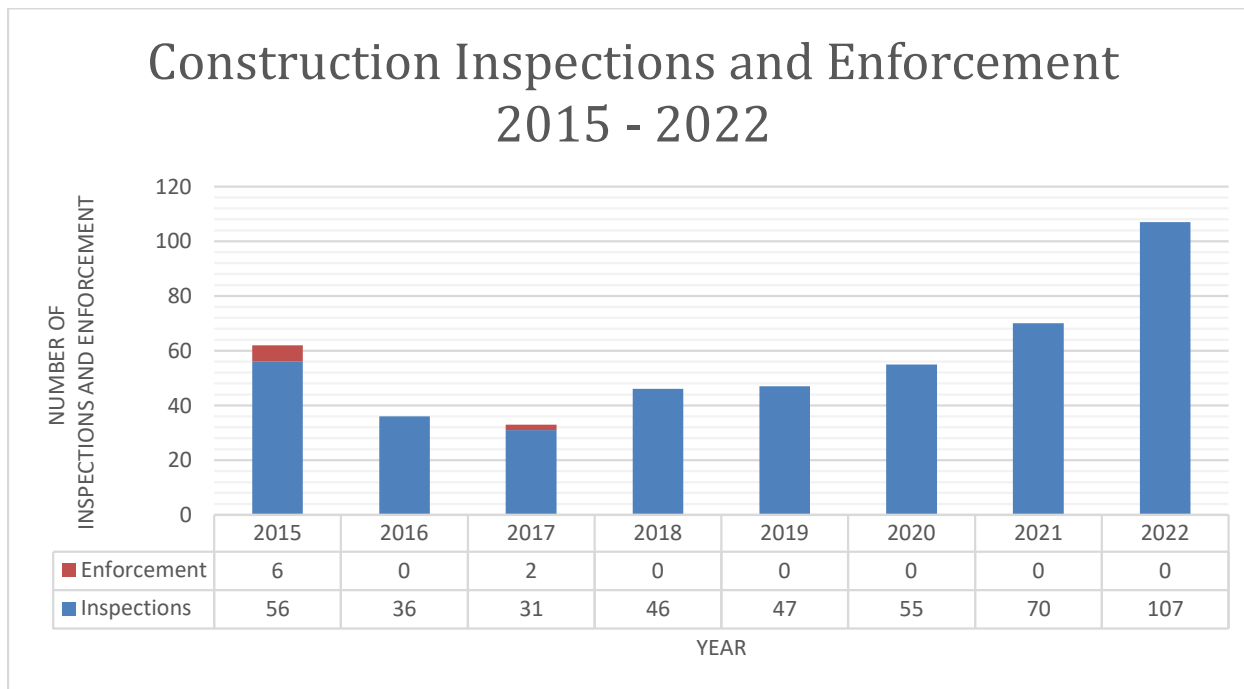


Figure 8. Construction Inspections and Enforcement from 2015-2022

5.7 POST-CONSTRUCTION STORMWATER MANAGEMENT

Table 15 summarized all post-construction related stormwater management. In 2022, there is one ongoing new PBMP installation related project, which is anticipated to be completed in April 2023. Two rounds of semiannual inspections were conducted in 2022 to review proper PBMP operations by HODT-Harbors. Comprehensive PBMP inspection and cleaning has been adjusted to be conducted biennially and completed in 2022. PBMP maintenance is required through lease agreements, due diligence, property covenants, ROE/easements, etc. for HDOT-Harbors tenants. 100% of tenants completed their PBMP inspections and cleanings in 2022.

Table 15. Post-Construction Stormwater Management

Description	Response
Estimated percentage of new development/redevelopment projects adequately regulated for post-construction stormwater control	100 %
Number of new permanent BMPs	0
Site inspections (for proper BMP operation) completed	2
BMP maintenance required through lease agreements, due diligence and property covenants, ROE/easements, etc.	1
Note: Data is from the 2022 calendar year.	

5.8 OPERATIONS AND MAINTENANCE

A total of 30,614.04 tons of debris was removed in 2022, which is significantly higher compared to 162.05 tons removed in 2021. The storm drain cleaning generated 242.10 tons of waste in 2022 which has increased from 21.37 tons of waste removed in 2021. HDOT-Harbors employees and tenants demonstrated their commitment to pollution prevention through the implementation and maintenance of proper BMPs.

Table 16. Operations and Maintenance

Description	Response
Average frequency of catch basin inspection and cleaning when needed	2 times/year
Number of storm drain cleanings	159
Quantity of screenings/debris removed from storm sewer infrastructure	242.10 tons
Disposal or use of screenings (landfill, publicly owned treatment works (POTW), compost, beneficial use, etc.)	PVT Landfill
• Vacuum truck(s) owned/leased by HDOT-Harbors	1
• Vacuum trucks specified in contracts	No
• % Structures cleaned with vacuum	100%
• % Structures cleaned with manual labor	0%
• Rotary brush street sweepers owned/leased	4
• Vacuum street sweepers specified in contracts	No
Average frequency of street sweeping	2 times/week
Quantity of sand/debris collected by sweeping	165.41 tons

Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	Landfill
• Green Waste	7.04 tons
• Refuse	745.39 tons
• Scrap Metals	29,653.96 tons
• Human Waste	0
• Used Batteries	5
• Electronic Waste	0
Note: Data is from the 2022 calendar year.	

Figure 9 shows the level of debris and waste removed due to small MS4 maintenance actions over the last eight years.

- In 2022, HDOT-Harbors removed 7.04 tons of green waste, 745.39 tons of refuse, 165.41 tons of sweeper waste, 29,653.96 tons of scrap metal, and 242.1 tons of storm drain waste.
- In 2021, HDOT-Harbors removed 5.99 tons of green waste, 80.86 tons of refuse, 39.8 tons of sweeper waste, 13.97 tons of scrap metal, and 21.37 tons of storm drain waste.
- In 2020, HDOT-Harbors removed 40.03 tons of green waste, 755.95 tons of refuse, 268.14 tons of sweeper waste, 51.39 tons of scrap metal, and 9.65 tons of storm drain waste.
- In 2019, HDOT-Harbors removed 6.01 tons of green waste, 853.22 tons of refuse, 233.95 tons of sweeper waste, 29.41 tons of scrap metal, 4.55 tons of recycled metal, and 6.31 tons of storm drain waste.
- In 2018, HDOT-Harbors removed 17.58 tons of green waste, 801.98 tons of refuse, 259.53 tons of sweeper waste, 26.48 tons of scrap metal, 3.77 tons of recycled metal, and 1.13 tons of storm drain waste.
- In 2017, HDOT-Harbors removed 36.74 tons of green waste, 748.30 tons of refuse, 23 tons of sweeper waste, 15.80 tons of recycled material, 15 tons of recycled metal, and 4 tons of storm drain waste.
- In 2016, HDOT-Harbors removed 50.66 tons of green waste, 845.33 tons of refuse, 23.11 tons of sweeper waste, 49.66 tons of recycled metal, and 12 tons of storm drain waste.
- In 2015, HDOT-Harbors removed 33 tons of green waste, 802 tons of refuse, 121 tons of sweeper waste, 103 tons of recycled metal, and 121 tons of storm drain waste.

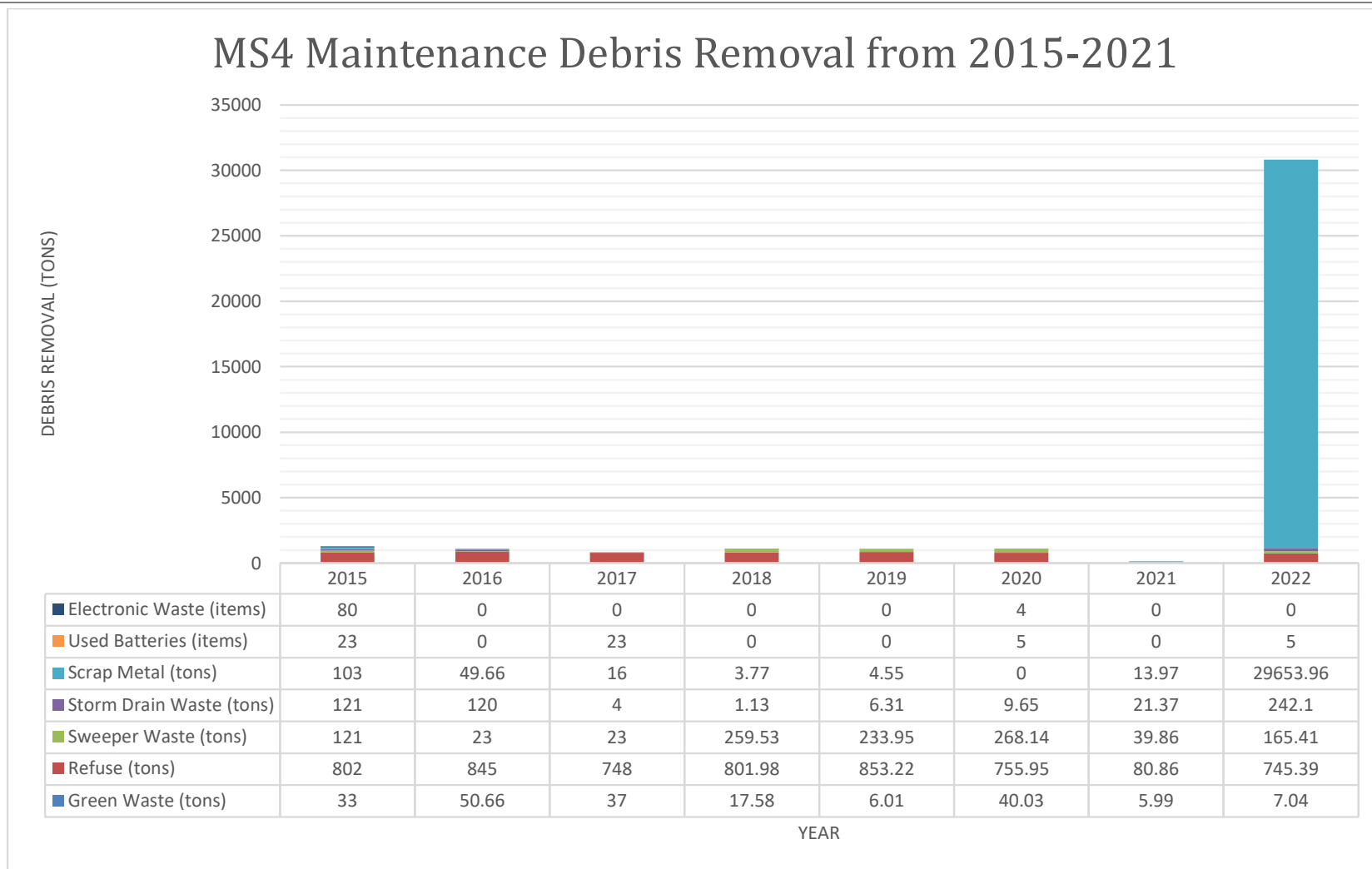


Figure 9. MS4 Maintenance and Debris Removal from 2015-2022

6.0 CONCLUSION

HDOT-Harbors continues to strive towards compliance with all requirements of the CWA and conditions of their NPGCs. The measurable goals that have been developed to gauge permit compliance and program effectiveness for each MCM has been deemed successful in 2022. All six MCMs are 100% in compliance.

HDOT-Harbors revised their SWMP and program manuals in 2022 to reflect the renewed HAR 11-55, Appendix K permit. As well as update any outmoded BMP measurable goals into more appropriate targets and included current program activities, policies, and requirements that have evolved over the last several years.